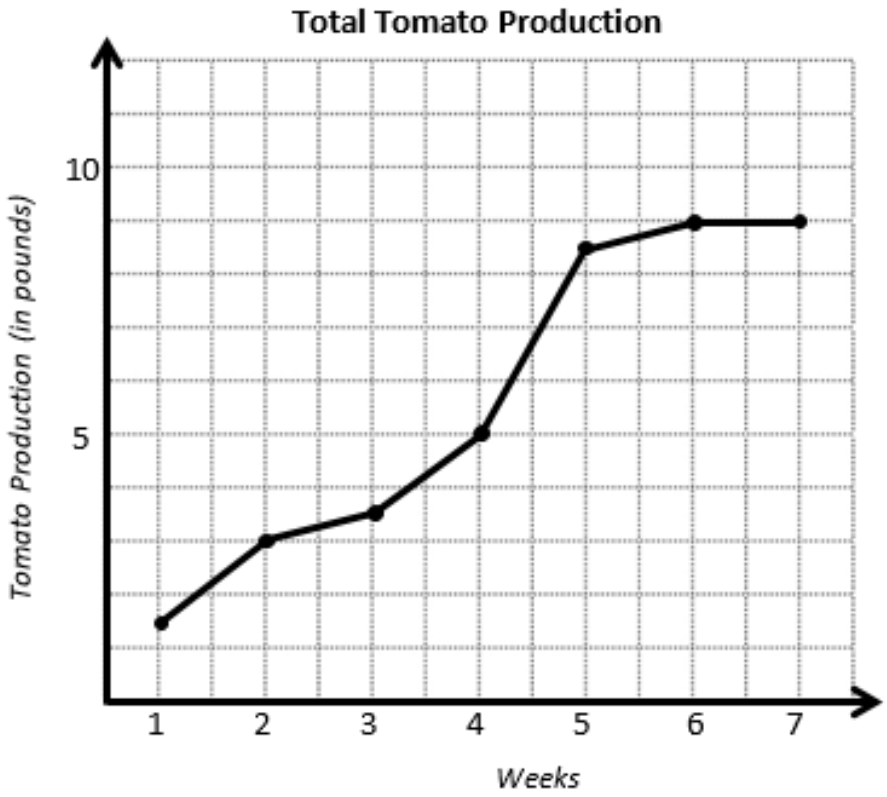
Name: _____ Date: _____

1. The line graph below tracks the total tomato production for one tomato plant. The total tomato production is plotted at the end of each of 7 weeks. Use the information in the graph to answer the questions that follow.



a. How many pounds of tomatoes did this plant produce at the end of 7 weeks?

b. After how many weeks did the tomato plant produce 3 pounds?

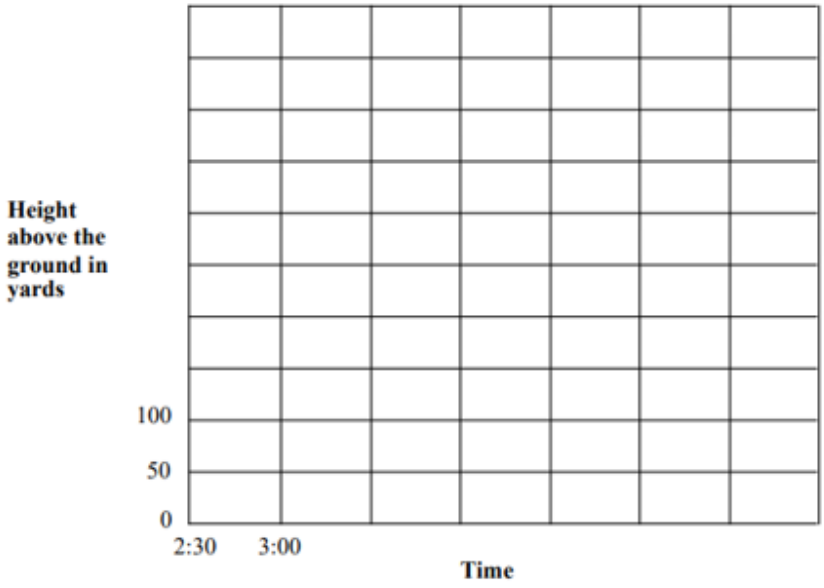
c. What do the coordinates (4, 5) mean in the context of this problem?

d. How many pounds of tomatoes did this plant produce from Week 2 to Week 6? Explain how you know.

e. Challenge: Which one-week period showed the greatest change in tomato production? The least? Explain how you know.

2. On her eightieth birthday, Sarah's granny went for a trip in a hot air balloon. The table below shows the schedule of the trip.

Time	Height above the ground (in yards)
2:30	0
3:00	150
3:30	250
4:00	350
4:30	500
5:00	250
5:30	100
6:00	0



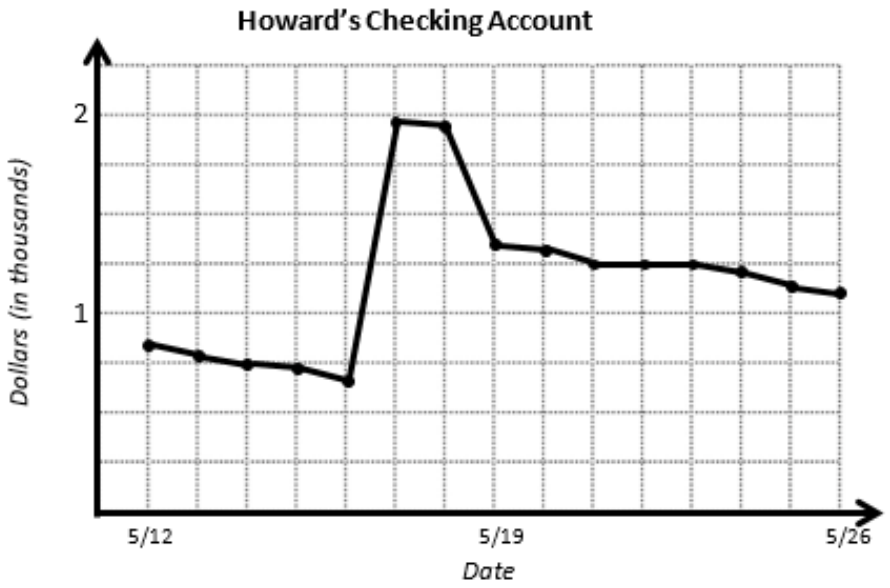
a. Finish labeling the axes and draw a line graph to show the balloon trip.

b. At about what time do you think the balloon rose to 400 yards? Explain how you figured this out.

c. At about what height do you think the balloon was at 5:50? Explain how you figured this out.

d. For about how long did the balloon stay above 250 yards?

3. The line graph below tracks the balance of Howard's checking account, at the end of each day, between May 12 and May 26. Use the information in the graph to answer the questions that follow.



a. About how much money does Howard have in his checking account on May 21?

b. On what date does Howard have $2,000 in his checking account?

c. On what date did Howard have the least amount of money in his checking account? How much did he have? How do you know?

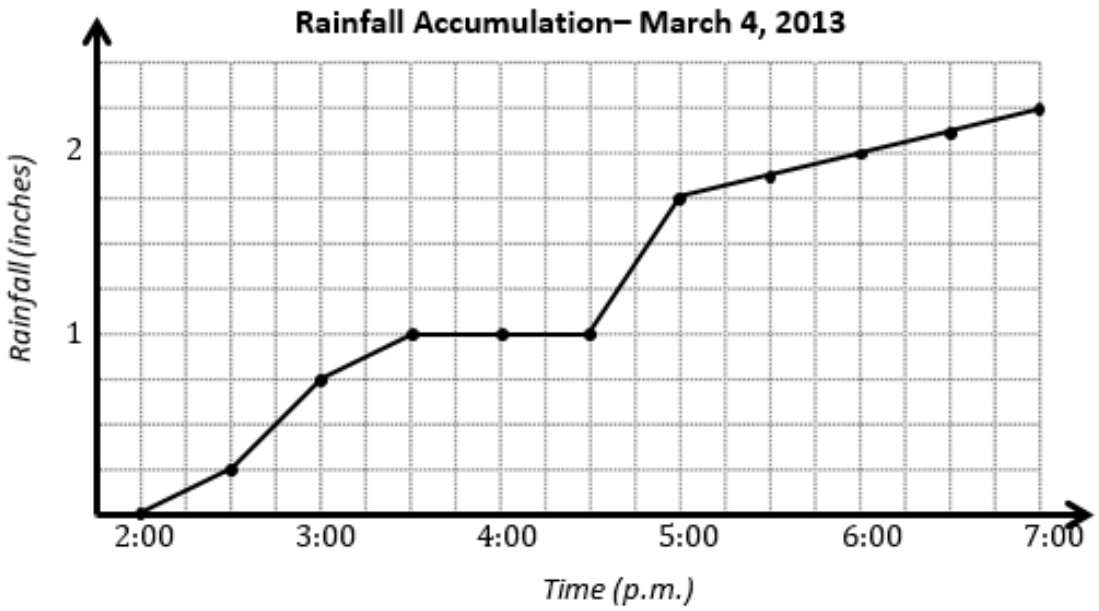
d. If Howard spends $250 from his checking account on May 26, about how much money will he have left in his account?

e. Explain what happened with Howard's money between May 21 and May 23.

f. Challenge: Howard received a payment from his job that went directly into his checking account. On which day did this most likely occur? Explain how you know.

g. Challenge: Howard bought a new television during the time shown in the graph. On which day did this most likely occur? Explain how you know.

4. The line graph below tracks the rain accumulation, measured every half hour, during a rainstorm that began at 2:00 p.m. and ended at 7:00 p.m. Use the information in the graph to answer the questions that follow.



a. How many inches of rain fell during this five-hour period?

b. How much rain had fallen by 5:00 p.m.?

c. By what time had $\frac{3}{4}$ inches of rain fallen?

d. What does the coordinate (6:00, 2) mean in the context of this graph?

e. During which half-hour period did $\frac{1}{2}$ inch of rain fall? Explain how you know.

f. Challenge: During which half-hour period did rain fall most rapidly? Explain how you know.

g. Challenge: Why do you think the line is horizontal between 3:30 p.m. and 4:30 p.m.?

h. Challenge: For every inch of rain that fell here, a nearby community in the mountains received a foot and a half of snow. How many inches of snow fell in the mountain community between 5:00 p.m. and 7:00 p.m.?

Sources

1. EngageNY Mathematics Grade 5 Mathematics > Module 6 > Topic D > Lesson 20 — Problem Set, Question #1 Grade 5 Mathematics > Module 6 > Topic D > Lesson 20 of the New York State Common Core Mathematics Curriculum from EngageNY and Great Minds. © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the CC BY-NC-SA 3.0 US license. Accessed Dec. 2, 2016, 5:15 p.m.. Modified by Fishtank Learning, Inc.

2. Inside Mathematics Performance Assessment Tasks Grades 3-High School *Granny's Balloon Trip* *Granny's Balloon Trip* of the Performance Assessment Tasks created by the by the Mathematics Assessment Resource Service (MARS) of the Shell Centre for Mathematical Education, University of Nottingham, England are made available by Inside Mathematics under a license from Shell Centre Publications. Accessed May 24, 2018, 5:02 p.m..

3. EngageNY Mathematics Grade 5 Mathematics > Module 6 > Topic D > Lesson 19 — Homework, Question #1 Grade 5 Mathematics > Module 6 > Topic D > Lesson 19 of the New York State Common Core Mathematics Curriculum from EngageNY and Great Minds. © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the CC BY-NC-SA 3.0 US license. Accessed Dec. 2, 2016, 5:15 p.m..

4. EngageNY Mathematics Grade 5 Mathematics > Module 6 > Topic D > Lesson 19 — Problem Set, Question #1 Grade 5 Mathematics > Module 6 > Topic D > Lesson 19 of the New York State Common Core Mathematics Curriculum from EngageNY and Great Minds. © 2015 Great Minds. Licensed by EngageNY of the New York State Education Department under the CC BY-NC-SA 3.0 US license. Accessed Dec. 2, 2016, 5:15 p.m..